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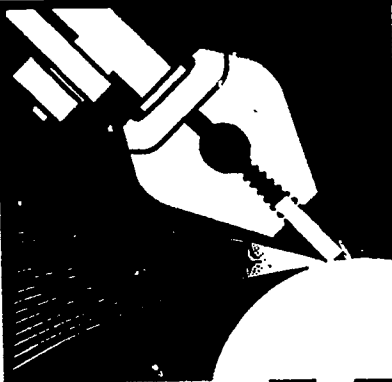
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## ABSTRACT

The Minnesota Defense Conversion Adjustment Project was initiated in 1993 with funding provided through the U.S. Department of Labor's Defense Conversion Adjustment Program to help workers at a Minnesota defense plant make the transition from assembler and related production classifications to machinists and other positions requiring specific job literacy, technical skills, and knowledge. Workers identified as being at risk of job loss or dislocation received retraining in machine tool technology and significant support services, including assessment and career counseling and planning. The project has remained a partnership of the Teamsters Service Bureau, Saint Paul Technical College, Teamsters Local 1145, and Alliant Techsystems, Inc. Among the project's main accomplishments are the following: approximately 65 individuals have received training in working with computer numerical control equipment and automatic screw machines; approximately 150 individuals have received job-specific basic skills training; individual/family assessment/counseling, crisis intervention, career planning, and social service agency referral services have been offered to all workers on an "as-needed" basis; and formative and summative project evaluations have been conducted. (MN)

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# The Minnesota Defense Industry Conversion Project

## A Partnership for Retraining

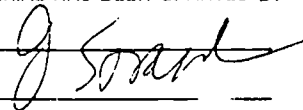
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# Project Overview

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December 4, 1995

AVA Presentation

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# The Defense Conversion Act

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## **An Effort to Assist Industries and Communities Adjust to Defense Budget Reductions**

The decrease in U.S. Department of Defense spending for the ten year period from 1987 through 1997 is expected to be 30%. This amounts to an average decrease of \$10 billion per year for the period. This spending decrease will reduce defense spending from 6% of the gross national product in 1987 to 3.5% in 1997. This reduction will strongly impact defense procurement which will drop \$46 billion during the period. Expenditures for military personnel are also expected to decrease \$25 billion over the same period.

## **Effects of the Defense Spending Decrease**

The defense spending reduction has been disruptive to defense related industries and personnel. Directly involved are defense industry workers, military personnel, defense dependent firms and communities with high concentrations of defense related activities. The end result is the creation of dislocated and at-risk workers, separated military personnel and laid-off civilian Department of Defense employees that need to locate new positions in an organization not directly related to the defense community.

This overall situation has produced unique problems for individuals, companies and whole communities. Individuals that are affected include dislocated and at-risk defense workers, separated military personnel, and laid-off civilian Department of Defense employees. In many cases, these individuals are highly trained but extremely specialized and are facing a saturated labor market in their home area.

The companies that are most seriously affected are those that have specialized in production of components and/or products meeting highly specialized military specifications. Even though these firms often have sizeable resources in terms of facilities, equipment and capable workers they face a major crisis associated with the transfer to non-defense products and markets or downsizing to match decreased defense contracts.

Communities that have become dependent on defense related activity in the area have had to make major adjustments to reduced payroll and income associated with local procurement of products and services. The closing of military bases and major defense service facilities directly affect consumer oriented business.

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## **Federal Government Response**

The federal government through the Departments of Defense and Labor provided several programs to address the needs of workers, firms and communities. The Office of Economic Adjustment (OEA), within the Department of Defense, provided planning grants and staff assistance to local government agencies and community groups. These efforts focused primarily on the reuse of military installations and defense plants.

The Economic Development Administration (EDA) also provided funds to communities facing major job losses from both defense and non-defense-related dislocation. The funds from these sources could be used for technical assistance, planning, and implementation of the adjustment plans but usually did not focus on worker retraining. Specific assistance to affected workers was included in portions of the Job Training Partnership Act administered by the Department of Labor. To address the specific impacts of defense cutbacks, the National Defense Authorization Act was passed in 1991 allocating \$150 million to the Department of Labor to Operate a Defense Conversion Adjustment Program (DCA).

The DCA program awarded grants to states, employers, business and labor associations to provide retraining, skills upgrading, adjustment assistance, and placement services to individual defense workers and

civilian employees dislocated because of defense reductions. Assistance specifically directed at firms was included in the 1993 Department of Defense budget. The budget included funds to support advanced manufacturing technology, dual use technology and commercial-military integration.

## **Defense Conversion Adjustment Demonstration Project Concept**

In May of 1992 the Department of Labor announced in the Federal Register the availability of approximately \$5 million for projects related to dislocation aversion, increased worker mobility and Community Planning. Twelve demonstration grants were awarded in November of 1992. A second round of similar funding was announced in June of 1993. Seven additional grants totaling approximately \$3.4 million were awarded in November of 1993.

Grants were awarded under categories including dislocation aversion, increased worker mobility, community planning, economic development, and local initiatives. Some of the demonstration projects were classed under one of the categories while others involved parts of several. The Department of Labor grouped the resulting projects under one of three conceptual models.

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# Various Conceptual Models

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## Dislocation Aversion Model

The primary thrust of projects under this model is to assist firms in restructuring their operations to allow successful competition in commercial markets. These projects work with defense-dependent firms interested in restructuring and worker retraining to further company diversification and/or conversion efforts. Firms are assisted in one or more of the following processes:

- Assess the firm's strengths and weaknesses and their opportunities for conversion or diversification.
- Develop strategic plans for conversion or diversification including financial strategies for implementing the plan.
- Reorganize the workplace to implement improved technologies, more flexible production procedures, and new worker roles and responsibilities.
- Provide technical assistance and training to key employees in the areas of marketing, production planning, financial restructuring, record-keeping and total quality management.
- Retrain workers in the areas and skills necessary to help the firm compete in broader markets.

## Worker Mobility Model

Worker mobility projects serve defense workers after dislocation has occurred or when dislocation is unavoidable. These projects are designed to provide a means of testing new and innovative methods to increase the mobility of at-risk and/or laid-off workers. These projects may also have been organized to respond to impending closures or downsizing of military facilities that result in job loss for civilian DOD employees and/or military personnel. Various combinations of the following approaches are included in projects classified as worker mobility.

- Services that respond to the crisis needs of dislocated workers, including personal, family and financial counseling, and stress management.
- Assess individual skills and interests, assist workers to explore new occupational areas that have potential, and provide assistance in the development of employment goals and job search strategies.
- Identify occupations that need workers with skills similar to those of the workers that have been dislocated. Assist workers in the transfer to those jobs by providing skills certification, short-term skills enhancement or longer term retraining.



- Assist individuals to start small businesses or joint ventures to transfer technology developed in the defense sector to commercial applications.
- Prepare defense workers for the cultural and organizational differences that exist between defense-oriented and commercial-oriented workplaces.
- Assist workers to market their defense/military work experience to commercial employers.
- Assist workers to identify job opportunities in other regions and plan for relocation.

## Community Planning Model

Mass defense industry layoffs or the closing of large military facility in a particular geographic area can have a severe impact on the communities involved. Initial worker dislocation can have devastating effects on the volume of business in the area reducing immediate employment possibilities for the laid-off workers, and substantial downstream layoffs by smaller local businesses. The community planning model emphasizes the activities needed to develop a coherent and unified community based response to the situation.

Two (2) key elements are needed for effective local action: a core of community leadership, and a consensus-building long range plan. The perception of local needs and the activities already underway have a great influence on the final form of these

projects. The following approaches were included in the proposals for projects identified under the community planning model.

- Develop an effective coalition involving state and local officials, public and private agencies, and interest groups that agree on a process for reaching consensus on key goals.
- Collect and analyze information about the direct and indirect impacts of defense cutbacks on the local community.
- Identify decisions to be made and alternative options. Examples include:
  - a. Options for facility reuse.
  - b. Alternative strategies to prevent further dislocations by providing services to at-risk firms and workers.
  - c. Service designs and delivery approaches to help dislocated workers adjust.
  - d. The potential for regional economic development.
- Identify available community assets and resources.
- Develop a coherent and comprehensive plan for community response that coordinates the activities of all agencies and individuals using participatory decision process.
- Mobilize national, state, and community resources needed to realize the plan and oversee its implementation.

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# Project Partnership & Team

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## **Projects Supported By Defense Industry Conversion Demonstration Funds**

Nineteen (19) grants were made in the two (2) rounds of competition for funding. The twelve (12) projects that were funded during the first round were announced in November 1992. The second round competition resulted in the funding of seven (7) projects in November of 1993. Each of these projects is discussed briefly to illustrate the diverse organization and objectives of these grants. Evaluation reports are available from the U. S. Department of Labor detailing the organization and operation of the projects.

### **The Minnesota Defense Conversion Adjustment Demonstration Project**

A partnership of the Minnesota Teamsters Service Bureau, Alliant Techsystems, Inc., Teamsters Local 1145, and the St. Paul Technical College was awarded Defense Conversion Act funds from the U.S. Department of Labor to establish a demonstration project in late 1993. The project was intended to assist Alliant Techsystem workers in making a transition from assembler and related production classifications to machinists and other positions requiring specific job literacy, technical skills and knowledge.

The project was designed to address the needs of assemblers and related production workers who: (a) were at risk of job loss or dislocation unless they secured a machinist or related position, (b) were viewed as ineligible for machinists and related positions due to lack of technical skills and knowledge, and (c) possibly could experience difficulty in upgrading their skills in relation to workplace changes because of an identified lack of essential basic skills. The project also included significant worker support services such as assessment, career counseling and planning, and others.

### **The Partnership**

The official grantee for the project is the Minnesota Department of Economic Development (formerly the Department of Jobs and Training). Other than during the early planning phases, state involvement has been limited to attending steering committee meetings and submitting required reports.



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## **The other members of the partnership and their involvement are:**

### **1. The Teamsters Service Bureau**

A non-profit service group partially funded by the union. The group has had extensive experience working with dislocated workers in Minnesota and providing union membership with career planning, family counseling and crisis intervention services. The Service Bureau provided a project coordinator for overall day- to-day management of the project, secretarial and case worker support for maintenance of records and facilitation of meetings, workplace literacy instructors responsible for basic literacy skills enhancement and counselors to provide career information, general referrals, and crisis intervention services.

### **2. The Saint Paul Technical College**

The largest of the regional technical colleges in the State of Minnesota with a full time enrollment of approximately 3,300 and nearly 20,000 individual enrollments in evening and customized training classes. The college offers extensive technical programs with an especially strong machine shop emphasis and customized training experience. The college provided a one-half time instructional coordinator and additional instructors that taught a majority of the technical courses in the project. The college staff also provided specialized curriculum and customized training services.

### **3. Teamsters Local 1145**

The Union representative for the hourly production workers at Alliant Techsystems, Inc. The President and Education Director actively participated in the initial planning and on-going operation of the project. Union Stewards from the various Alliant Techsystem manufacturing facilities served on operating teams and were extremely helpful in organizing meetings and classes, and identifying experienced individuals for input on program content, process, and emphasis.

### **4. Alliant Techsystems, Inc.**

One of the largest defense-related employers in the Minneapolis/St. Paul area. The company had been the defense division of Honeywell Corporation until September of 1990 when it was spun-off as a separate corporation. Between 1990 and the end of 1993 the corporation reduced employment from 8000 to under 4000. The Project was involved with three (3) Alliant facilities including two (2) assembly operations and one (1) machine shop. Most project meetings and classes were held in one of these facilities. Exceptions were classes in which adequate equipment was not available or when meeting agendas did not require the attendance of Alliant employees. Company commitment to the project also included payment of tuition fees and on-hours instruction for many of the classes.

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# Management & Trainees

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## Project Management

The daily management of the project was the responsibility of the Teamsters Service Bureau. The Bureau employed a full time project coordinator for planning and managing project activities. Coordination of the activities of the other partners was also a major responsibility of that position. A technique that proved to be very effective in achieving this goal was the use of an Internal Planning Team. This team assured representation and potential input from all partners/participants involved in the project. The team was made up of fourteen (14) members representing the following groups:

### **Minnesota Teamsters Service Bureau**

- Project Coordinator (1)

### **Alliant Techsystems, Inc.**

- Management Representative (1)
- Supervisor Representatives (3)
- Workforce Representatives (4)

### **St. Paul Technical College**

- Customized Training (1)
- Training Specialist (1)
- Curriculum Specialist (1)

### **Teamsters Local 1145**

- Officers (2)

The team provided input on most aspects of the project through regularly held meetings. Discussions were very open in the meetings with very good communications developing between the partners.

## The Target Trainee Group

The primary target group consisted of assemblers and related manufacturing workers. A survey of over 700 of this group had been completed during the early phases of proposal development. Based on this data, few of these workers had formal training beyond high school. Less than one-third had any postsecondary education or technical training.

The survey also indicated the workforce was an average age of 45 years (range 20-65) with an average length of employment at Alliant of 22 years. Approximately 43% of the workers are over 40 years of age, while only 11% are under the age of 30. Seventy-six percent (76%) of all workers reported a high interest in participating in vocational training to acquire the new skills necessary to make a transition to machinist positions. However, only 23% indicated a strong desire to update basic skills (math, science, reading, blueprint reading, and computer skills for example).

Other groups were also involved including experienced machinists needing upgrading to acquire information on new equipment and technologies. This training was essential to the retention of advanced machine shop jobs in-house rather than completing them on a subcontract basis.

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# Project Objectives 1 - 7

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A project must operate within a framework to maintain consistency and achieve the agreed upon goals. The framework under which this project functioned was based on the seven objectives that were part of the original proposal. Each of these objectives is discussed briefly to illustrate the procedures used and how they influenced the direction and success of the total project. More detailed discussions of key issues that were encountered throughout the project are discussed in more detail later in the paper.

## Objective One

Establish a project steering committee to facilitate the overall planning, design, implementation, and evaluation of the training program.

This objective was modified and expanded to allow a maximum of input from the various partners and the workers/employees/trainees involved in the project. A traditional steering committee was organized with representatives from each of the partners and interested government and community agencies. In addition, teams of individuals with specific interests and experience were formed to facilitate the process. One of these, the Internal Planning Team, was used extensively to promote the planning, design, and implementation of many of the project elements. This team will be discussed in more detail later in the paper.

## Objective Two

Develop the training program to address the job-specific basic skills and technical knowledge and skills required of machinists and related occupational classifications at Alienate Techsystems.

This objective was treated in a very straight forward manner using the expertise of St. Paul Technical College, the employees of Alliant Techsystems (machinists, supervisors, and management), and officials of Teamsters Local 1135. Working together, using small group meetings, representatives of the partners identified the content of a machinists training program that was within the parameters of the machinist field, company requirements and union specifications.

Once this definition was agreed upon problems relating to seniority developed which delayed implementation of the actual training for several weeks. A solution to the seniority issue was eventually found but company indecision throughout the duration of the project caused continual adjustment to the curriculum and presentation format.

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## Objective Three

Conduct Functional training for 49 Alienate Techsystems workers for machinist positions and related occupational classifications.

The original project proposal indicated that three groups would be provided technical skills training to meet this objective:

- (1) assemblers and other personnel at-risk of layoff because of no machinist skills,
- (2) experienced machinists at-risk because of insufficient current machinist skills, and
- (3) machinist engineers lacking practical machinist skills needed to communicate/work easily with machinists from the production floor.

A 348 hour machinist assistant program was designed for training at-risk assemblers. Two groups of experienced machinists received either 80 or 100 hours of training to meet the requirements of the second classification. One of the groups worked with computer numerical control (CNC) equipment while the second worked with automatic screw machines (ASM). Although the training program was designed and approved for the machinist engineer group it probably will not be completed because layoff has effectively eliminated the classification.

Approximately 65 individuals have been enrolled in these courses to this point in the project.

## Objective Four

Conduct job specific basic skills training for 160 hourly and engineering personnel

Details associated with this objective provided a variety of directions to the project including computer training, training in problem solving skills, and the use of various instructional approaches. One of the concepts that has been used in the project is on-hours and off-hours instruction. Other concepts are job-specific basic skills and essential basic literacy enhancement. The on/off hours concept refers specifically to being paid the normal hourly rate for class attendance versus attendance on the employee's personal time. Basic literacy enhancement relates to general math, reading, and writing skills.

On-hours instruction was limited to a twelve (12) hour course of training in basic computer concepts designed for both machinists and assemblers from the manufacturing areas. A variety of off-hour courses were also offered in general computer operation, word processing, spread sheets and data base program operation. All of the computer courses emphasized manufacturing applications and approaches. Interest in basic literacy enhancement was expressed by a broad spectrum of individuals involved in project training.

Approximately 150 individuals have been enrolled in these courses at this point in project operation.

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## **Objective Five**

Develop and make available support services.

The Teamsters Service Bureau has provided these types of services in the past to the general union membership. These services include individual and family assessment and counseling, crisis intervention assistance, career planning, and appropriate referrals to social service agencies and outplacement services. All participants in the project programs were made aware of these services. Services were provided on an "as needed" basis.

## **Objective Six**

Produce and disseminate training curricula and related products and project reports to national, state, and local sources.

A Dissemination Planning Team was formed to identify, plan, and assist in the development of products and organize an approach to materials dissemination. The dissemination plan includes the distribution of printed materials and presentations at recognized professional conferences at the state, national and international levels.

Printed materials planned for dissemination are: (1) a project overview detailing the design and operation of the project, (2) an overview of the machining industry including a resource guide, (3) curriculum guides in the areas of manufacturing related computer skills, advanced CNC machining procedures, advanced ASM machining

procedures, and the train-the-trainer process, and (4) procedures for the successful promotion of basic literacy skills including computer literacy.

## **Objective Seven**

Provide for both formative and summative evaluation of the demonstration project.

Evaluation is a major part of the project involving the day-to-day evaluation informally carried on by regular project personnel (overall project coordinator, instructional coordinator, class instructors and members of the various project committees). Summative evaluation will be done using a local external evaluator contracted by the project, and an evaluation group contracted by the U.S. Department of Labor.

The Internal Planning Team described previously has been an excellent source for on-going evaluation. Promotion of an open dialogue in all meetings has allowed continuous input and rapid program modification to provide maximum effectiveness. The external evaluators have also provided information that has alerted project management to weakness or points where problems could develop.

The training programs associated with the project can be grouped under three (3) classifications. These include technical skills, job-specific basic skills, and basic literacy skills enhancement.



# Project Related Training

## Technical Skills Training

The technical skills training portion of the project was directed toward two (2) groups. The first group was made up of experienced machinist working primarily in the automatic screw machine (ASM) and the computer numerical control (CNC) areas. All of these individuals had many years of experience (ten to over 25) in the machine shop facility at Alliant. They have worked primarily on high volume jobs that require few machine set-ups or changes. This has resulted in reduced job flexibility and awareness of new processes.

Two classes were designed and offered this group including a one hundred (100) hour course for those working in the CNC area and an eighty (80) hour course for those in the ASM area.

These classes used a variety of instructional methods ranging from regular classroom lecture to small groups (2-4 individuals) working on the production floor under direct supervision of the instructor.

The second training group was made up of assemblers and others at-risk interested in becoming machinist assistants. This group was also made up of long time Alliant employees with a minimum of fifteen years experience. A three hundred forty eight (348) hour block of courses was especially designed for this training group. The block included the following courses.

<u>Course</u>	<u>Length in Hours</u>
Blueprint Reading .....	72
Machine Trade Math.....	60
Machine Trade Theory .....	60
Machine Trade Shop I .....	48
Machine Trade Shop II .....	48
Geometric Dimensioning and Tolerancing.....	60

Instructional methods used for instruction in this block of courses ranged from regular classroom lecture to small group demonstrations using equipment on the production floor.

Instruction in both of these technical skills programs was conducted on-hours and primarily at the Alliant work site. The only exception was a small portion of the CNC laboratory work which was moved to the St. Paul Technical College when production demands at Alliant would not allow the use of their equipment.

## Job-Specific Basic Skills Training

This area of training was included in the original proposal to provide all participants in the project a broader exposure to related topics that would increase their ability to use the technical training to its best advantage. Another aspect was the hope that some of the topics would produce an atmosphere in the company where peer tutoring would be practiced and training would continue on an organized basis.



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The topics that were proposed for this area included computer information, the peer-tutoring process, train-the-trainer procedures and computer integrated manufacturing information.

A twelve (12) hour short course in computer concepts that could readily be used in a manufacturing setting was the most successful of the courses. That course was offered on-hours. Several other ten (10) hour computer short courses in the wordprocessing, spreadsheet and database area attracted considerable interest on a off-hour basis.

### **Basic Literacy Skills Enhancement**

This area was included in the project to support individuals interested in pursuing technical training that needed to review basic math, reading and writing skills. All machinists, at-risk assemblers and others associated with the project were eligible to take these courses on an off-hours basis. Six (6) classes have been offered during two rounds of classes with approximately fifty (50) students having completed at least one class.

### **Other Support Services**

In addition to training programs described above, the project participants were provided a number of additional personal support services. These included assessment, career counseling and planning, and family assistance. The Teamsters Service Bureau provided these services as part of their involvement in the project.

### **Selection of Project Trainees**

The project was designed to provide training to Alliant Techsystems employees working in the machine shop and assembly areas at their New Brighton, Minnesota facilities. As stated earlier in this paper the program was structured to provide training ranging from basic literacy enhancement to advanced machining techniques. The programs were available to all employees working in the assembly and machine shop areas that were interested in training, had appropriate experience and demonstrated basic ability.

The training program was promoted to eligible employees through a series of meetings conducted by company management and local union officials. Individuals from the service bureau and the technical college provided support during these meetings to clarify specific questions concerning operation and content. After these initial meetings recruitment was conducted for the specific elements of the program.

### **Technical Skills Training**

Selection for advanced CNC and ASM courses was initially based on seniority. Interest was high with most senior machinists eager to be enrolled in the class covering their specialty. After several weeks of instruction, it became evident that a difference existed between the two classes. The content in the CNC class was on a theoretical level while the ASM class was based more on practical applications.

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The CNC class appealed to the senior machinists while the senior ASM machinists felt they were not learning new material. This situation developed even though the content of the classes had been organized following an analysis involving selected Alliant Techsystem machinists. As a result of this content variation, the enrollment in the ASM class gradually changed to younger, less senior individuals while the CNC enrollment remained more stable.

Selection of individuals for the entry level machinist training developed into a major crisis for the project. The original plan, based on the project proposal, was to provide machinist training to at-risk assemblers and other interested in becoming machinists.

After a successful training program these new machinists would be eligible to move into machinist positions that became available at Alliant or other employers. This concept became unacceptable to both company management and union officials as the start-up of training approached. It appeared that the problems related to company training costs, the potential of the company losing or never using the newly trained individuals and a threat to union seniority caused by an existing company policy which holds critical need machinists "out-of-seniority". Specific reasons were never clearly stated by either. Project management was not included in the negotiations where an agreement was worked out. This issue required approximately four weeks of negotiation

time and resulted in the organization of a new employment classification in the company called machinist assistant and the creation of machinist assistant positions in the machine shop.

The company posted openings for the newly created machinist positions as soon as the negotiations were complete. Assemblers and others at-risk completed application forms and the screening process was initiated. Applicants were tested using the TAABE Test to measure language, reading and math concepts application ability, the Bennett Mechanical Comprehension Test to measure ability to understand mechanical concepts and the Minnesota Paper Form Board Test to measure the ability to visually work with spatial relations.

The project management planned to use these tests to identify remedial work needed by the individuals as they entered the training program. However, the company sought access to the scores for job selection purposes. This became an issue when only twenty (20) machinist positions were created. A compromise solution involved providing remedial work parallel to the training if the instructional staff felt it was suitable for the individual needing help.

Individuals with extremely low scores were encouraged to complete remedial work and wait for additional machinist assistant positions to open in the future.

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## **Job-Specific Basic Skills Training**

All machinists, at-risk assemblers and others associated with the project were eligible to become involved in the training offered in this area. The classes were announced throughout the Alliant New Brighton machine shop and assembly areas using bulletin board displays and promotion by both company and union personnel. Individuals that were interested in taking any of the training were asked to sign an interest sheet. All individuals that expressed an interest in off-hour classes were enrolled. Company approval was required for the one on-hours class that was involved. This restriction was based on production needs rather than controlling individual training.

## **Basic Literacy Skills Enhancement**

Basic literacy instruction was available to all members of the workforce involved in the project. Availability of the instruction was promote primarily through union representatives with interest expressed through sign-up sheets. Classes were available only on an off-hours basis and were scheduled on-site at Alliant at the convenience of the participants.

## **The Project's Training Process**

A wide variety of activities were planned and carried out during the project. It became evident early in the operation of the project that a flow chart illustrating the overall training program would be helpful when implementing the various aspect of the process. Although several variations have been applied the process flow chart shown illustrates the major relationships in the assessment, training and evaluation areas.

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# Key Issues During Project

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## Key Issues Encountered During Project Operation

A number of issues were encountered throughout the project that have had a substantial influence on the operation and success of the various activities. Five (5) issues are briefly discussed to illustrate factors that should be considered when planning similar projects.

### 1. Focus: Individual vs Company Interests

The project proposal was written using the worker mobility model as the primary thrust of the project. Under that model the major emphasis was on preparing the workforce so they would be more marketable in the general labor force. Dislocation aversion concepts were also included but were not considered the major emphasis of the project.

During the early months of project operation it became increasing apparent that decisions were being made by the company outside both of these models. Those decisions had major impacts on the success of the project as it was originally designed. Typical examples of these decisions include extended delays on decisions concerning instructional content and placing training on hold for extended periods (4 to 5 months).

### 2. Target: Protection vs Advancement

The training of workers to improve skills in their current field or to enter a new field fell within the objectives of this project. When the workers being trained are working under a union contract this situation can become complicated as contracts usually contain a variety of clauses.

A number of the experienced machinist involved in this project were being "held out of seniority" to allow the company to maintain a viable machine shop operation. The original intent of the project was to train at-risk assemblers to form a "pool" of entry level machinists available to the company. That concept was not acceptable as many of these entry level machinists had more seniority than the current experienced machinists.

The solution was the development of a new classification called machinist assistant which required a lower level of training than the current machinist classification. The development of this approach delayed entry level machinist training for over a month and seriously threatened the continuation of the project.

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### **3. Testing: Curriculum Design vs. Employment Screening**

Individuals that were considered for machinist assistant training were given a battery of three tests to assist in planning their training agenda. The original plan was to build a "pool" of individuals with entry level machinist skills. However, the company decided to establish specific positions and train only a sufficient number of individuals to fill those positions.

A conflict arose when the company wanted access to test results for job selection purposes. Project management would not supply that information because of data privacy issues. The issue was solved by offering remedial work parallel to training. Individuals with extremely low scores were required to complete remedial work before entering training.

### **4. Scope: Basic Skills Enhancement vs Technical Training**

The project proposal called for a well designed package of technical training including basic literacy instruction, as needed, and job specific related information to maximize skill development for at-risk Alliant Techsystem employees.

The concept of technical training was widely accepted by all partners in the project. The attitude toward basic and related skills was not as universally accepted. This attitude appeared to be

concentrated more at the company management and supervisory levels but was expressed by some individuals associated with the other partners. Testing of at-risk assemblers interested in machinist training indicated a need for basic literacy instruction.

A carefully executed promotion for basic literacy enhancement in math, writing and reading resulted in the operation of several classes on an off-hours basis. A mixture of on-hours and off-hours related technical classes were also held for computer related information. Union personnel were very effective in promoting and organizing both the basic and related content classes.

### **5. Commitment: Production Demands vs Training Time**

The project proposal was developed cooperatively with input and development shared by the Minnesota Teamsters Service Bureau, Alliant Techsystems Inc., St. Paul Technical College and Teamsters Local 1135.

Each partner acknowledged their support and commitment to the project by this involvement and a commitment of over \$525,000 of local support. (For comparative purposes, federal project funding was \$444,000.) It became evident early in the project that production took precedent over training.

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All partners acknowledged the critical need for production to meet the contract obligations of the company. Many suggestions were made involving approaches that could be attempted to support both training and adequate production including varied training formats and shared job assignments. However, a general feeling prevailed among the other partners that the company devoted less than adequate attention to meeting the spirit of the proposal.

Examples include a several month delay in the initial attempt to start basic machinist training, training classes delayed in starting or interrupted because personnel would not be released to attend classes, high overtime requirements for machinist which effectively eliminated off-hours instruction and the placing of some classes on "holds" up to five months in length.

## References

U.S. Department of Labor. (1994). Evaluation of the Defense Conversion Adjustment Demonstration: Interim Report on Implementation, (Report Series 94-F), (Dr. Mary G. Visser and Deborah Kogan)

U.S. Department of Labor. (1995). Minnesota Defense Conversion Adjustment Demonstration (Draft Copy of Interim Report), (Deborah Kogan - Social Research Associates)